

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended) A double-sided printing machine, comprising:

a printing unit for printing opposite faces of a sheet-like material;

ink supply means for supplying ink to said printing unit, said ink supply means being supported to be brought into contact with and separated from said printing unit;

a delivery pile, provided downstream of the printing unit, for collecting said sheet-like material; and

transport means for transporting said sheet-like material from said printing unit to said delivery pile while holding said sheet-like material, said transport means including,

a first delivery chain passing through a lower side of said ink supply means,

a second delivery chain provided above the delivery pile, wherein the second delivery chain is located in relatively close proximity to a site directly above the delivery pile path and extending in a straight line along ~~extends along~~ its entire length and being parallel to a floor surface on which ~~of the~~ printing machine is installed,

a plurality of transport cylinders for transporting said sheet-like material from said first delivery chain to said second delivery chain and provided at a

position higher than the first delivery chain and lower than the second delivery chain, said plurality of transport cylinders including a first transport cylinder and a second transport cylinder provided immediately adjacent to the delivery pile and arranged in zigzag fashion with respect to a generally vertical direction,

wherein the first transport cylinder and the second transport cylinder are located below a position where the sheet-like material transported by the second delivery chain is released from the second delivery chain and delivered to the delivery pile,

first detection means for detecting a status of printing on one face of said sheet-like material when said sheet-like material is transported by said first transport cylinder; and

second detection means for detecting a status of printing on the other face of said sheet-like material when said sheet-like material is transported by said second transport cylinder.

2. (cancelled)

3. (previously presented) A double-sided printing machine according to claim 1, wherein each of said first and second transport cylinders is a suction cylinder.

4. (previously presented) A double-sided printing machine according to claim 1, further comprising:

first drying means provided on the upstream side, with respect to the transport direction, of a detection position at which said first detection means detects said sheet-like material held by said first transport cylinder; and

second drying means provided on the upstream side, with respect to the transport direction, of a detection position at which said second detection means detects said sheet-like material held by said second transport cylinder.

5. (previously presented) A double-sided printing machine according to claim 4, wherein said first drying means is disposed to face said first transport cylinder, and said second drying means is disposed to face said second transport cylinder.

6. (currently amended) A quality inspection apparatus for a double-sided printing machine having a printing unit and a delivery pile provided downstream of the printing unit, comprising:

transport means, provided between the printing unit and the delivery pile, for transporting a sheet-like material from the printing unit to the delivery pile, said transport means including,

a first delivery chain passing through a lower side of said printing unit,

a second delivery chain provided above the delivery pile, wherein the second delivery chain is located in relatively close proximity to a site directly above the delivery pile and extends in a straight line along its entire length so as to be parallel to a floor surface on which of the printing machine is installed; and

a first transport cylinder and a second transport cylinder provided at a position higher than the first delivery chain and lower than the second delivery chain and adapted to transport the sheet-like material from the first delivery chain to the second delivery chain,

wherein the first transport cylinder and the second transport cylinder are located below a position where the sheet-like material transported by the second delivery chain is then released from the second delivery chain and delivered to the delivery pile,

the first transport cylinder and the second transport cylinder being arranged in zigzag fashion with respect to a generally vertical direction, and

wherein ~~such that~~ a first space is formed above the first transport cylinder, and a second space is formed below the second transport cylinder;

first detection means, provided in the first space, for detecting a status of printing on one face of said sheet-like material when said sheet-like material is transported by said first transport cylinder; and

second detection means, provided in the second space, for detecting a status of printing on the other face of said sheet-like material when said sheet-like material is transported by said second transport cylinder.

7. (previously presented) The quality inspection apparatus according to claim 6, wherein at least one of said first and second transport cylinders is a suction cylinder.

8. (previously presented) The quality inspection apparatus, according to claim 6, wherein said first detection means includes a first spot light provided inside the first space and said second detection means includes a second spot light provided inside the second space.

9. (previously presented) The quality inspection apparatus, according to claim 6, further comprising:

first drying means provided in the first space for drying said sheet-like material while being held by said first transport cylinder; and

second drying means provided in the second space for drying said sheet-like material while being held by said second transport cylinder.

10. (currently amended) A double-sided printing machine, comprising:
a printing unit for printing opposite faces of a sheet-like material;

ink supply means for supplying ink to said printing unit, said ink supply means being supported to be brought into contact with and separated from said printing unit;

a delivery pile provided downstream of the printing unit;

transport means for transporting said sheet-like material from said printing unit to the delivery pile while holding said sheet-like material, said transport means including,

a first delivery chain passing through a lower side of said ink supply means,

a second delivery chain provided above the delivery pile, wherein the second delivery chain is located in relatively close proximity to a site directly above the delivery pile and extends in a straight line along its entire length so as to be parallel to a floor surface on which ~~of the printing machine~~ is installed; and

a plurality of transport cylinders, arranged in a zigzag fashion, provided at a position higher than the first delivery chain and lower than the second delivery chain, for transporting said sheet-like material from said first delivery chain to said second delivery chain,

said plurality of transport cylinders including at least a first transport cylinder and a second transport cylinder, and;

wherein the first transport cylinder and the second transport cylinder are located below a position where the sheet-like material transported by the second

delivery chain is then released from the second delivery chain and delivered to the delivery pile,

first detection means for detecting a status of printing on one face of said sheet-like material when said sheet-like material is transported by said first transport cylinder; and

second detection means for detecting a status of printing on the other face of said sheet-like material when said sheet-like material is transported by said second transport cylinder;

first drying means provided on the upstream side, with respect to the transport direction, of a detection position at which said first detection means detects said sheet-like material held by said first transport cylinder; and

second drying means provided on the upstream side, with respect to the transport direction, of a detection position at which said second detection means detects said sheet-like material held by said second transport cylinder.

11. (cancelled.

12. (new) A double-sided printing machine according to claim 1, wherein said plurality of transport cylinders include a third transport cylinder and wherein the first, second and third transport cylinders are located between an upstream-side delivery cylinder and a downstream-side delivery cylinder,

with the first transport cylinder being in contact with the upstream-side delivery cylinder and the third transport cylinder being in contact with the downstream-side delivery cylinder, and with the second cylinder being located between and in offset contact with the first and third transfer cylinders.

13. (new) A double-sided printing machine according to claim 6, wherein said plurality of transport cylinders include a third transport cylinder and wherein the first, second and third transport cylinders are located between an upstream-side delivery cylinder and a downstream-side delivery cylinder, with the first transport cylinder being in contact with the upstream-side delivery cylinder and the third transport cylinder being in contact with the downstream-side delivery cylinder, and with the second cylinder being located between and in offset contact with the first and third transfer cylinders.

14. (new) A double-sided printing machine according to claim 10, wherein said plurality of transport cylinders include a third transport cylinder wherein the first, second and third transport cylinders are located between an upstream-side delivery cylinder and a downstream-side delivery cylinder, with the first transport cylinder being in contact with the upstream-side delivery cylinder and the third transport cylinder being in contact with the downstream-

side delivery cylinder, and with the second cylinder being located between and in offset contact with the first and third transfer cylinders.